FYI BUSINESS SOLUTIONS

AN FYI WHITE PAPER:

Business Analytics in the Cloud: A White Paper prepared by FYI Solutions

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Interest in business analytics among small and mid-sized businesses is soaring. More and more data, both structured and unstructured, are becoming available to mid-sized companies from new sources. A well-implemented business analytics solution can help companies predict customer needs, be in tune with changing market conditions, mitigate financial risks, or create pricing strategies. No longer do businesses need to operate by looking in the rear-view mirror.

The Challenge

Although enterprise-level analytic software has been around for years, the products didn't always make sense for smaller businesses. Business intelligence and Business Analytics environments have often been described as difficult to implement, maintain, develop, and use. The required hardware, level of software complexity, and/or cost per user meant that only some midmarket businesses, and almost no small businesses, could benefit from the available products. The reasons for this are as follows:

- Purchase price of a business analytics tool:
  - Up till now, pricing for business analytics tools was expensive and out of reach for most small to mid-sized companies
- Purchase price of the required infrastructure:
  - Business Analytics, as with most other software implementations, required an on-premises infrastructure. The configuration required for an "analytics" environment – servers, data access licenses, and operating systems -- separate from the operational systems, was cost-prohibitive
- The need for knowledgeable IT people in-house:
  - To ensure the data is organized and accessible in the way the tool requires it
  - To keep the environment up and running, apply software upgrades, and ensure the security of the data

The Basic Solution: Business Analytics in the Cloud

The combination of Cloud services and Business Analytics tools aimed at small and mid-sized businesses is a growing trend that will enable business to not just see where they have been, but where they are heading. Products such as IBM's Cognos Express, a Business Analytics solution for small- and mid-sized businesses, make analytics more affordable and easier to implement.

A recent study of Chief Information Officers (CIOs) by IBM revealed that the top strategic technology investment over the next five years at outperforming mid-sized organizations is business analytics, with cloud computing emerging as the fastest growing technology area for CIOs.

The emergence of the cloud as a viable solution for Business Analytics has enabled the following:

- Timeliness: Dashboards and reports can be created without a long lead-time to get the necessary resources and architecture in place.
- No infrastructure build-out: No new hardware to purchase and install. No additional burden on facilities and existing infrastructure support staff.
- No new resources: Business Analytics solutions are complex. There is a growing set of service providers who can take care of all installation, configuration, and implementation tasks, as well as end user training. Advanced power user and report developer training is also available.
- Financial Advantages: There is generally no long-term commitment or contract, although longer term commitments can result in significant cost savings. Expenses can be shifted from capital expenditures to operational. Pricing plans from at least one software vendor are available.

Cloud-based Business Analytics solutions are cost-effective. In traditional enterprise computing, servers are dedicated to specific applications, and each server is sized to support application growth and spikes in demand. This results in low physical server utilization and limits the ability to quickly provision new server capacity. In addition, capacity planning to support new IT initiatives has been complicated by the need to manually gather configuration, historical purchasing, and other information.

The FYI Solution

Overview

FYI's solution consists of three pieces: Business Analytics expertise, a tool designed specifically for small to mid-sized businesses, and a reliable cloud hosting provider:

- Business Analytics is a core competency for FYI Solutions. FYI Solutions' significant experience in Business Analytics has enabled delivery of powerful systems that have given our clients comprehensive understanding of the factors affecting their business performance and enables better decision-making across the enterprise.

- FYI's initial offering supports IBM Cognos® Express, a leading solution among business analytics tools for small to mid-sized businesses. IBM Cognos® Express is the first and only integrated business intelligence (BI) and planning solution purpose-built to meet the needs of midsized companies. It delivers the essential reporting, analysis, dashboard, scorecard, planning, budgeting, and forecasting capabilities that midsize companies need at a price they can afford, without the need for large capital expenditures. Everything is included in a pre-configured solution that is easy to install, easy to use, and easy to buy through FYI Solutions.

- Cloud Hosting is provided via an FYI Solutions hosting service.

FYI Solutions' process begins with a discovery period, which includes capacity planning. Our client will work with FYI Solutions who, as a Premier IBM Cognos Partner, can facilitate the Cognos Express purchase. FYI Solutions will then work with the client post-purchase to full implementation.

FYI Solutions has identified a set of packaged services that facilitate the implementation of Cognos Express on the Cloud. At its most basic, FYI Solutions' services include product sale, product implementation, and a set of start-up supporting services. Additional services offered will build on the start-up services, and may include report development and maintenance, up to and including a complete turnkey implementation.

Architecture

Our offering is based on a private cloud architecture where secure communication is established between the client's database(s) and the hosting provider through a Virtual Private Network (VPN) connection. This connection enables data to be securely transmitted to the hosting provider, where the Cognos application resides. Cognos dashboards and reports developed exclusively for our client are then executed, and "data" is transformed into "information" that gives you insights into your business. The dashboards and reports are then transmitted back to your company through the secured VPN connection.

An alternative to this configuration enables the data to reside with the hosting provider, in addition to the actual execution of the dashboards and reports. Our initial discovery period with the client will determine which option provides the most value to them. Note: if your company doesn't already have a database ready for reporting, FYI can design and build one that is customized specifically for your reporting needs.

Following is a high-level schematic of the solution:

Services

FYI's significant experience in Business Analytics enables us to deliver powerful systems that give our clients comprehensive understanding of the factors affecting their business performance and enables better decision-making across the enterprise.

Start-up Services:

Although the needs of each client will vary, there is a set of services that must be provided at a minimum. We refer to these as our **basic service offering**, as follows:

- FYI Solutions works with the client to identify the Business Intelligence/Business Analytics solution that meets their needs. This includes a capacity planning step.
- Once the solution is identified as Cognos Express, the customer purchases Cognos Express through FYI Solutions
- FYI Solutions works with the hosting provider to set up the virtual machine at the hosting site as well as at the client site
- FYI configures the VPN connection, assuring its reliability and security
- FYI then installs the Cognos Express (CX) core product and the modules that the client has purchased
- FYI configures the data sources to point to the client data

At this point, the product has been purchased and installed, and all secured connectivity has been established.

Data Services:

A well-designed data source(s) and the resultant ease of use and speed of data manipulation are vital to a successful Business Analytics implementation. If the native data source is not suited for reporting, a data mart or data warehouse will be required. This undertaking will be addressed as part of the initial discovery period with the client. The adage that "the tool is only as good as the data that it sits on top of" is applicable regardless of the size of the company.

FYI Solutions has expertise in data modeling, data marts, and data warehouses, and can help clients create well-architected, optimized analytical data stores to support their businesses.

Once the data warehouse/data mart is created and reports have been developed, these will require periodic maintenance, including software upgrades. To continue to support our clients, we can create managed services agreements. Based on a time period established with the client, FYI Solutions will provide ongoing data services support on either a fixed fee or "as needed" basis. The managed services agreement may also include additional report development.

Report Development and Maintenance:

Once the data source(s) is solidified, the next step is solution creation. FYI Solutions is a Premier IBM business partner for Cognos Express. We have staff that is highly qualified to plan, configure, and implement IBM Cognos solutions, and

then maintain them for our clients if desired. As with data services, FYI Solutions is positioned to provide ongoing data services support on either a fixed fee or "as needed" basis. The managed services agreement may also include additional report development.

Business Analytics Governance:

A Business Intelligence Center of Excellence covering specifications, standards, and repeatable operations ensures the viability of the BI environment going forward. FYI has implemented best practices and tools for Business Intelligence for many of their clients and has the expertise to do this for Cognos Express Cloud clients as well.

Security:

The question of the security of a cloud-based solution often arises. Our solution utilizes a Private Cloud architecture, rather than a Public Cloud architecture. Data is encrypted to and from the hosting provider and the client site. Our hosting provider uses SAS70 compliant co-located data centers that are housed in nondescript buildings that feature extensive physical security. Authorized staff must pass multi-factor authentication to access data center floors.

Physical access is strictly controlled both at the perimeter and at building ingress points by professional security staff utilizing video surveillance, state of the art intrusion detection systems, and other electronic means.

Conclusion

FYI Solutions' Cognos Express Cloud is designed to deliver critical business benefits, including reduced provisioning times, higher resource utilization, high availability, and improved capacity management without the burden of capital infrastructure expenditures or the need to hire an IT staff. FYI Solutions is well-positioned to successfully implement Business Analytics solutions in partnership with our valued clients.

About Barbara Schiffman:

A results-oriented leader with extensive experience in Information Technology, Barbara has over 30 years of experience in managing the development, maintenance, and operation of IT-based business systems. Her experience spans across multiple technology platforms and applications. Her specialties include strategic technology management and planning, outsourcing, knowledge management, QA Centers of Excellence, and business analytics. Barbara helps clients optimize the business value of their technology investment. She is an accredited project management professional (PMP).

About FYI Systems:

For over two decades through partnership with business and technology executives, FYI implements the technology behind innovative processes and solutions that streamline business operations and enable the agility and visibility needed to navigate today's competitive marketplace. Our success in delivering performance management, business intelligence and process management services has made FYI the provider of choice for companies looking to elevate corporate performance through value-driven technology solutions.